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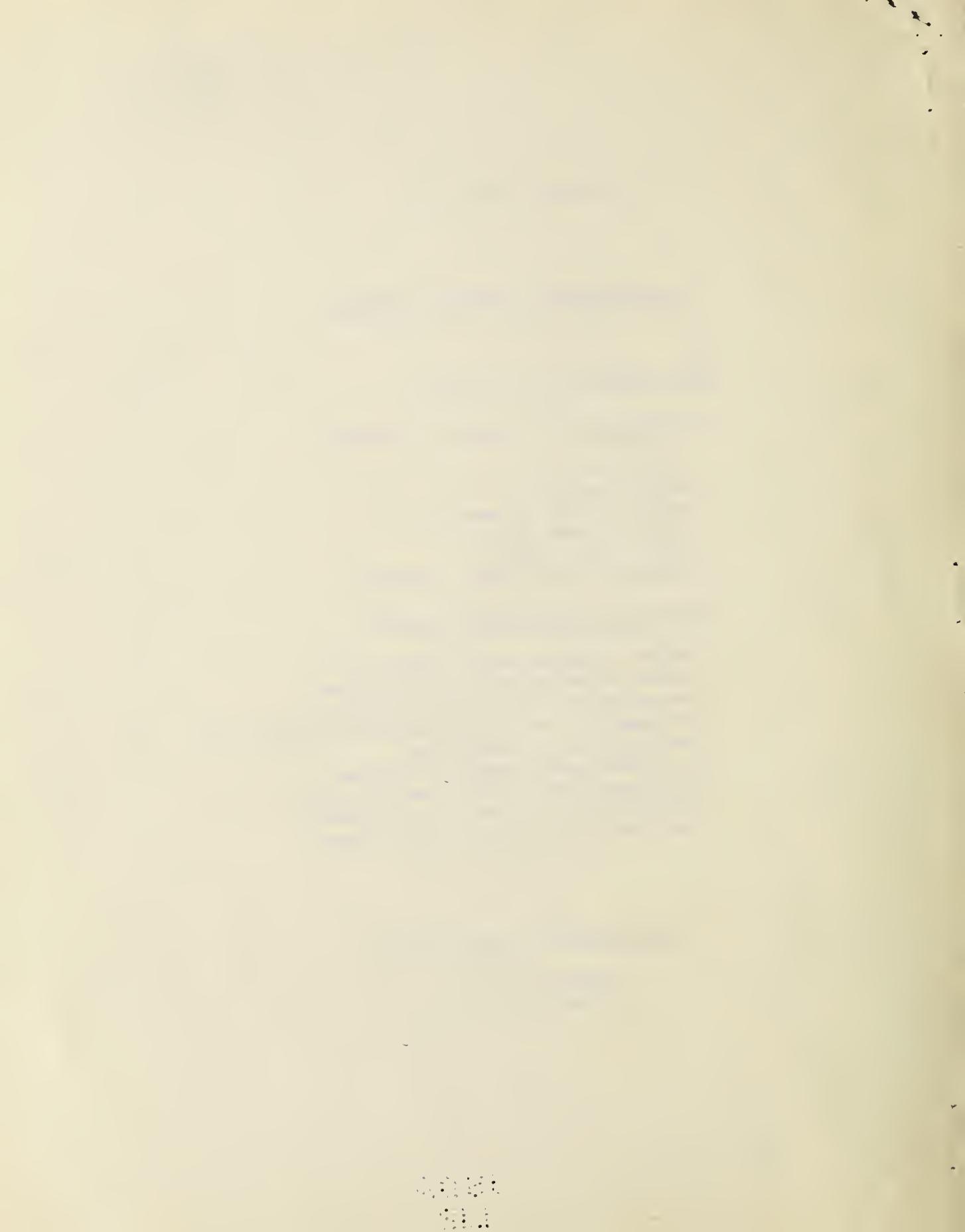
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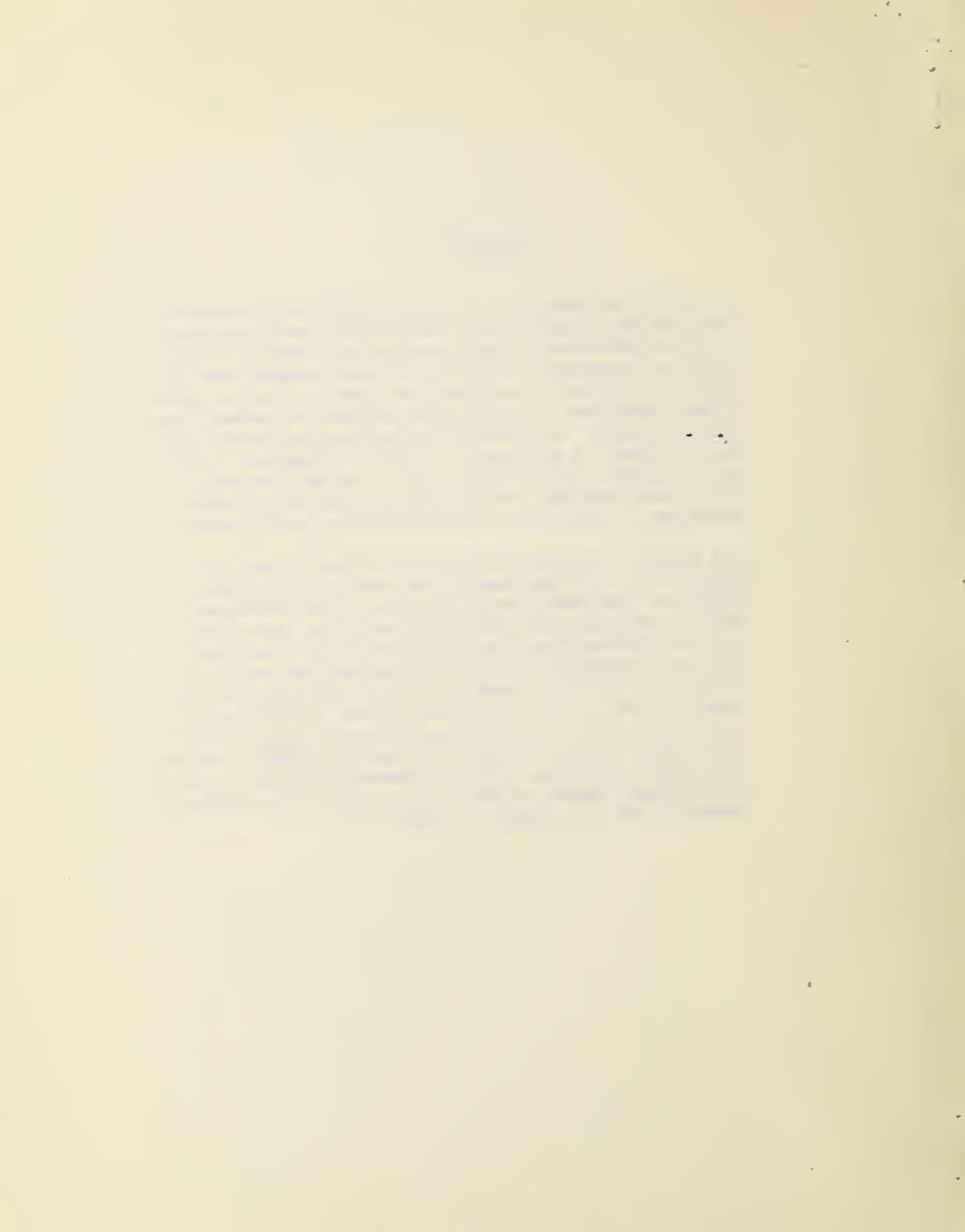


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## FOREWORD

After the war there will be a real need for a national food program designed to accomplish two basic objectives: (1) to maintain and expand the domestic demand for food in order to prevent a collapse of farm incomes, and (2) to raise the diet of American families to adequate nutritional standards. In current discussion of various possible policies, the proposal for a "National Food Allotment Program" is receiving increasing attention. This report offers a tentative appraisal of what the major issues are, and what effects such a program might be expected to have on food consumption and farm income.

The report was prepared by Rainer Schickele and F.V. Naugh, WFA, in close cooperation with Sadye Adelson, BINHE and Charlotte Chatfield, WFA. Miss Adelson contributed the analysis involving use of the data from the 1942 Wartime Spending and Saving Study, and Miss Chatfield furnished the analysis of the food supplements required to bring the diets of low-income families up to adequacy under 1945 conditions. Others who have been consulted and have offered many valuable suggestions are H. R. Tolley, BAE, and Hazel Stiebsling, BINHE. Informal conferences were also held with several individuals in the National Social Security Agency and in the Children's Bureau of the Department of Labor.



## A-RATIONAL FOOD ALLOTMENT PROGRAM

### The Setting of the Problem

Food production in the United States has increased substantially during the war. It will doubtless continue at a high level after the war. For this reason there is widespread concern over the return of "surpluses."

We have learned even in this country, however, that there has never been more food than people need. A "food surplus" is an indication that we have failed to develop food distribution machinery which meets the needs of both farmers and consumers. It is this failure which has been responsible for food piling up in warehouses or being diverted to such wasteful uses as tankage and fertilizer while people go hungry and farm prices drop to disastrously low levels. The recurrence of such situations must be prevented by appropriate price, production and distribution policies. Among the latter, effective food distribution programs offer great promise as a means of accomplishing two objectives: (1) improving diets and health of our people; and (2) maintaining a large and stable market for farm products at fair prices.

There is ample evidence that a large part of the American population needs more and better food; that malnutrition is a major contributing factor in the rejection of many draftees; that poor diets breed indolence, depress physical stamina and mental alertness, and reduce men's productive and social usefulness to the community. Hence, it is pre-eminently in the public interest to insure that every family has a real opportunity to secure an adequate diet, day in and day out.

In spite of such unmet needs, there is grave danger that food surpluses will begin to glut the market soon after V-E Day. Farmers have responded magnificently to the call for more food production for the war effort. While 25% of total meat production, 15% of dairy products and eggs, and 25% of canned vegetables now go to the armed forces and to our Allies, our own population is still better fed than ever before. To what extent will domestic consumers be able to absorb the food that is now being used for military and lend-lease purposes, and at prices which will give farmers a fair income?

Any practicable program for maintaining full employment, a high rate of industrial activity and a high level of national income will go a long way toward overcoming malnutrition and toward assuring farmers of fair incomes. Thus, American farmers have a real interest in appropriate economic measures to maintain full employment. In addition to such measures, however, there will be need for special food programs after the war because of three main reasons: (1) Although there can be no doubt about the desirability of full employment in industry and agriculture, it is only reasonable



to prepare for the possibility of less than full employment at least part of the time. In case there should be any slackening of business activity, we should be prepared with a program which can be expanded quickly to safeguard a minimum adequate diet and to maintain a satisfactory market for farm products. (2) Even during periods of prosperity, many groups of people will be undernourished unless special provisions are made for a more equitable distribution of the food supply. (3) A national food policy along the lines presented in this draft report will help maintain full employment and satisfactory income in agriculture and consequently will tend to dampen any possible decline in prices and employment in the rest of the economy.

A national food policy is in the interest of public welfare as well as of the farmers' welfare. If a high level of demand for food could be maintained, farmers would be able to keep their resources fully employed and the nation amply supplied with food, the only major group of consumer goods whose consumption cannot be "deferred" for more than a few hours without endangering man's health and morale.

Ultimately, the case for a positive national food policy rests upon the ground that the nation has a vital concern in the health of the people as well as in the welfare of the farmers who produce the food. It is a profitable public investment to give every family access to an adequate diet, regardless of what the level of employment and business activity happens to be at any given time. It is equally wise to assure farmers a stable market that will enable them to earn sufficient income for a decent level of living.

These are the basic reasons that justify the adoption of special public policies to assure adequate production and equitable distribution of food.

Apart from the wartime measures of food rationing and price-ceiling regulations, we have had experience with three major types of food distribution programs: The "Food Stamp" Program, the School Lunch Program, and direct food distribution to needy persons through welfare organizations and other institutions.

The former Food Stamp Plan was limited mainly to families on relief. We will need to go farther and develop a program which will improve the diets of millions of non-relief families with low incomes and with many children. A recent proposal along this line is the National Food Allotment Bill, introduced in Congress by Senator Aiken first in May 1943 and re-introduced as Bill S.185 on Jan. 10, 1945. Congressional hearings have been held (Jan. 14 to 26, 1944) and several persons in the Department have been exploring the possibilities of an approach along this general line.



This report will discuss the possible character and scope of such a Food Allotment Plan. The plan outlined here is somewhat different from the Aiken Bill. Changes have been suggested to make the plan more effective (1) as a means of obtaining better nutrition and (2) of maintaining a satisfactory market for farm products.

## SUMMARY OF THE PLAN AND ITS EFFECTS

### Objectives

The objectives of the plan are:

- (1) to provide a concrete opportunity for every family to secure an adequate low-cost diet;
- (2) to provide a stable and expanding domestic market for food products, thereby preventing the accumulation of price-depressing surpluses, stabilizing farm income at fair levels, and permitting farmers to keep their labor and other resources fully employed.

The first objective is directed at consumers, and especially at those whose incomes are insufficient to secure an adequate diet. The second objective aims at raising and stabilizing domestic demand for farm products, preventing food surpluses and cushioning the impact of possible future business fluctuations upon farm income.

### Basic Provisions

It is not intended to discuss here in detail all the possible variations and alternatives of specific administrative provisions which a national food allotment program might require. Instead, an outline is drawn of the basic character and general operational procedure of a program designed to meet the stated objectives.

1. Once or twice a year, the actual per capita cost of an adequate low-cost diet would be determined. A recent study reveals that in 1942 a family had to spend about £170 per person per year for food in order to provide its members with a reasonably adequate diet. This amount would be the "food allotment" for 1942. It would rise and fall with food prices.
2. Each family would be entitled to buy food coupons of the face value of the food allotment for each of its members. In 1942, a family of 3 would have had to buy £510 worth of food coupons in order to participate in the program. This would enable the family to get a minimum adequate diet.



Since few families are able to pay out at any one time the money needed for a whole year's food budget, some method of installment buying of the food coupons would be necessary. The period for which a family would buy its food coupons might be geared to pay-check periods of the individual family--or it might be one month, with credit provisions allowing weekly payments. It is important that the family commit itself to buying its total food allotment for a designated period; it is not permissible to have a family buy only half or three-quarters of its allotted food coupons.

These food coupons would be accepted by retailers as legal tender for the purchase of food and would be redeemable at any accredited bank by the retailer.

3. The food coupons amounting to a family's food allotment would be sold at a price equal to 40 percent of the family's net money income, whatever that income happens to be. If, in 1942, the income of a family of 3 was \$1000, it would have been entitled to buy food coupons of a face value of \$510 at a price of \$400. A family this same size earning \$1275 would have had to pay \$510 for its food coupons, and therefore would gain no advantage by participating in the program. The difference between the family's contribution of 40% of its income and the face value of its food coupons would be paid by the government. This public contribution to the nutrition of the people would resemble more nearly a profitable investment in the physical and moral strength of the nation than a charitable hand-out.

Whether the family's contribution should be set at 40% or at some other percentage of its income might deserve further scrutiny. This proportion has been chosen because it was found that families on the lowest income level which provides for an adequate diet spent about 40% of their income on food. (See page 18 below).

4. Along with the issuance of food coupons educational material would be distributed, including simple instructions and advice regarding the wisest way in which these food coupons should be spent in order to obtain an adequate balanced diet. Discussion meetings and demonstrations on nutritional problems might be arranged in areas of heavy participation in the program.
5. In order to meet more specifically the objective of preventing food surpluses, up to one-third of the total food coupons might be designated for purchase of a restricted list of foods only. If at a given time in a certain region, certain food products



(such as potatoes or eggs) were to appear in surplus, a designated part of the coupons (identified by numbers or letters or colors) may be declared acceptable only in exchange for the specified surplus foods.

This method of restricting the use of certain coupons to specific foods could also be employed in order to stimulate the consumption of foods in which diets in a given region are particularly deficient.

6. Participation in the program should be made as simple as is administratively feasible. Any member of a household might apply by filling out a form stating the number and income of all members. On the basis of this declaration of the size of the household and the combined income of its members, the amount of the food coupon allotment and the household's contribution would be determined in the local office and sent to the applicant. A choice of several appropriate methods of purchasing the food coupons might be offered. It would then be up to the family to decide whether it wants to participate; if it does, the head of the household would be required to indicate which of the alternative methods of payment he prefers, and to commit himself to meeting his obligations accordingly.

These are the bare outlines of a National Food Allotment Program. In later sections of this report, some of the more important problems involved in these basic provisions are discussed in greater detail.

The plan bears some resemblance to the Food Stamp Program which was in effect from 1939 to 1943. Experience under the Food Stamp Program is useful in appraising the probable effect of certain aspects of a food allotment plan. The general character of the food allotment proposal, however, is quite different and is much broader in scope. It is not conceived as an emergency relief measure for the unemployed or primarily as a farm surplus disposal program, but rather as an integral part of national economic policy.

#### Effect on Food Consumption

The effect which such a program might be expected to have upon total domestic food consumption depends primarily upon three factors: the number of participants; the way in which they spend their food coupons, and the extent to which money formerly spent for food is released for non-food purchases.

1. Participation in the program is likely to be heaviest in low-income families, in large families, and in urban areas; that is, among households where the incidence of malnutrition has been shown to be most severe. Taking into account the rate of parti-



icipation experienced under the food stamp program, during the first year of operation about 80% of the "eligible" families in the lowest income bracket, might be expected to participate with the percentage participation declining as income increases. 1/ On the basis of 1942 income distribution and prices, almost 60% of all eligible families in urban areas could be expected to participate. This would comprise about 3 million urban families with 10.5 million members. If the program is administered with a minimum of red tape and social stigma, participation might increase considerably above that level. In small villages and on farms, percentage participation would probably be lower. By and large, however, the incentive to participate tends to increase in proportion with the family's need of more and better food. (See p. 21 below)

2. Food consumption of the participating families could be expected to increase in aggregate quantity and to change in composition. If the program had been in effect in 1942 in all urban areas (cities of 2,500 population or more), the food expenditure of all participating families would have increased by nearly 40% or by over 500 million dollars. 2/

In order to estimate how participating families would spend the food coupons, it is assumed that they would buy about the same diet as families who spend about the same amount for food (\$170 per person per year under 1942 conditions). On the basis of this assumption, in 1942 participating families would have consumed 63% more tomatoes and citrus fruits, 31% more meat, poultry and fish, 29% more milk, 21% more vegetables and fruits (other than citrus, tomatoes, green and yellow vegetables), 11% more eggs, 16% more green and yellow vegetables, and 8% more potatoes and sweet potatoes. The consumption of dry beans and peas and nuts, grain products, fats and oils, and sugars and sweets would probably not have been affected significantly.

These changes in food consumption would have brought the diets of the participating families much closer to the standard of

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- 1/ The term "eligible" is used to designate those families for whom participation would offer a pecuniary advantage; i.e. any family whose per capita income is at least  $2\frac{1}{2}$  times the food allotment would not benefit from participating in the program. (See p.21 below).
- 2/ At the time of writing, corresponding estimates for the village and farm population are not available. Work, however, is in progress which will indicate the probable effect of the program for the country as a whole.



adequacy. Nevertheless, they would be free to follow their tastes and food habits rather than the requirements of a nutritionally balanced diet. Although the monetary value of the food allotment permitted the purchase of a balanced diet, the families would probably have bought more eggs, vegetables, fruits, meats, fats and sugars, and less beans, peas, nuts, grain products, milk and potatoes than a balanced low-cost diet would require. This indicates the general direction in which an educational program (and possibly the earmarking of coupons for certain foods) should proceed in order to improve the composition of the diet of the participating families. (See page 23 below).

3. Under any food program for low-income families a certain amount of substitution of former food expenditures for non-food purchases is probably inevitable. Most families that previously spent more than 40% of their income on food would probably transfer all or part of that difference to non-food items. For instance, if a family of 3 with an income of \$1000 (under 1942 conditions) had spent \$450 for food, this program would permit purchase of \$510 worth of food for \$400, leaving \$50 that could be spent on clothing or anything else. On the basis of the estimates for urban participation under 1942 conditions, this substitution might amount to roughly one-third of the government's contribution. That is to say, of the \$235 contributed on the average by the government, between \$50 and \$75 might be expected to be used for non-food purchases (See table 3).

From the viewpoint of general welfare, this substitution might not be undesirable, since many low-income families badly need clothing, housing, medical services and many other essentials for a decent living standard. From the viewpoint of the more specific objectives of the program, however, it appears desirable to hold substitution to a reasonable minimum. If Congress appropriates certain funds for the purpose of supplementing inadequate diets and expanding the market for food, the program must be designed so that the bulk of the appropriated funds are actually used for increasing food consumption. Administratively feasible devices need to be worked out, therefore, to safeguard the proper use of such funds and minimize diversion into other uses. (For more detail on this issue, see page 18 below).

#### Effect on Farm Income

The program would tend to benefit farmers (1) by providing an expanded domestic food market and a cushion against the impact of possible future business recessions upon farm prices and income; and (2) it would help to move surpluses into immediate consumption rather than allowing them to depress prices.



The immediate effect of any such program would be to strengthen food prices throughout the market. Assuming that the demand for food is inelastic, it is quite possible that such a program might increase farm income in the short run by more than the amount of money spent by the government. This is because the effect of the plan in the short run would be to redistribute a given supply of food by allowing low-income families to get more of it, thus strengthening food prices by reducing the amount of foods available in the rest of the market.

In the long run, such a plan would, of course, affect production. In fact, it should be a powerful influence in adjusting farm production to the needs of consumers. Farmers would benefit in two ways--through better prices and through increased sales.

1. The anti-depression effect of the program probably offers the most important benefit to farmers--and, in fact, to everyone, regardless of occupation. If national income and payrolls were to decline and unemployment to increase, more and more consumers would find it advantageous to participate. The value of the food allotment would be determined by the food prices prevailing in the period preceding its determination (6-12 months); hence, the purchasing power for food available to participants in the form of food coupons would be substantially maintained in face of a declining price level. This means that in case national income decreases and the proportion of families in the lower-income groups increases, the government contribution to total food expenditure would increase--both by supplementing the purchasing power of an increasing number of participants and by contributing a larger proportion to the average food allotment. Such public expenditures would be strongly counter-cyclical in nature for another reason--they would augment the purchasing power of the lowest income groups whose propensity to consume is highest.

Hence, it is reasonable to expect that a national food allotment program would retard and dampen a downward swing in farm prices if a depression should develop, and would maintain food consumption at a higher level.

Aside from these dynamic aspects, the program would bring about an expansion of consumer demand for many important farm products at any level of business activity, even under conditions of full employment and high national income.

2. The surplus-preventing effect of such a program is of particular interest to farmers during the period of transition from war to peace. At the prices the government is committed to support, domestic consumers will not be able to absorb the total quantities of certain foods which are now going to the Armed Forces and our Allies. Hence, to the extent to which the program increased domestic consumption of



such foods at current prices, surpluses and the need for price support purchases would be reduced. The commodities which are likely to appear in surplus and whose consumption would be stimulated by the program are primarily vegetables, eggs and potatoes.

In addition to these general effects on surpluses, the program could be used to stimulate the consumption of specific surplus foods by earmarking certain coupons for the purchase of these foods, as has been pointed out above. (See also page 27 below).

#### Cost of the Program

The cost of the program to the government would depend principally upon the proportion of the population in the low-income groups, and upon the size of the participants' contribution. Under the assumed provisions, the funds required to finance the program would increase with falling national income, because the proportion of people in low-income brackets and the average contribution of the government would increase. Conversely, the cost of the program would decrease as national income rises and people move into higher income groups. From the viewpoint of fiscal policy and general economic stability the nature of public expenditures under this program is highly beneficial.

Under 1942 conditions, the program in urban areas, with nearly 10.5 million participants, would have cost the government \$744 million (excluding administrative expense). The participants would have contributed over \$1 billion. Food coupons of a face value of \$1 3/4 billion would have been issued. (See page 21 below).

The urban population represented about 56% of the total in 1942. It is likely that the inclusion of village and farm population in the program would bring the cost up to not much more than \$1 billion, because the expected percentage participation as well as the average contribution of the government to each food allotment in rural communities would be substantially smaller than in urban areas. A budget of \$1 billion for a national food allotment program appears to be a modest investment in national health and morale if it is compared with the daily war expenditures at present or with the cost of the production control program during the thirties.

If such a program were adopted and a considerable decline in employment and national income were encountered in the postwar period, the cost of the program would rise materially, as was pointed out above. The effectiveness of such public expenditures in halting the downward swing in farm prices and income would increase progressively with the seriousness of the depression. The stabilizing effects of such a program upon business activity and the economy in general, therefore,



would be quite pronounced. Farmers' purchasing power for industrial goods would be maintained at higher levels than otherwise would be the case, resulting in reduced unemployment.

If appropriations should not be sufficient to provide the full food allotment for all families wishing to participate there would be several possible alternatives. One alternative could be to limit the number of participants--for example, by operating the program only in the larger cities. If this were done, the full food allotment could be provided and the cost to participants would still be 40% of the income. Another alternative would be to provide fewer coupons, still charging 40% of the income. In this case, the food coupons would not be sufficient to provide an adequate diet. Still another alternative would be to charge more than 40% of the income and provide the full allotment.

Doubtless there are other alternatives. However, it would not be desirable to reduce the food allotment and at the same time make a corresponding reduction in the cost to participating families. If the family's contribution were set much below 40% of income, the program would become much less effective as a food and nutrition program, since money formerly spent for food could then be released for non-food purchases. A basic purpose of the 40% contribution is to ensure that the participating family actually continues to spend about as much for food as it did before, and that the government's contribution is actually used for buying more food.

#### Relation to Other Food Programs

To what extent would a national food allotment program duplicate or complement other types of food programs?

1. The School Lunch Program has several special advantages which justify its expansion and render it complementary to the food allotment plan rather than competitive. In the first place, children and adolescents require more food of certain kinds than the average adult, and school lunches offer a direct means of providing these special nutritional requirements of rapid growth and development. The composition of meals served in schools can be planned closely in line with the dietary needs of children. More or less systematic observation seems to indicate that eating a good school luncheon usually does not blunt the child's appetite at the family table. In view of the extremely crucial role that nutrition plays in laying a firm foundation of health and vigorous development of children, school lunches can hardly be looked upon as duplicating the purpose of a food allotment program.

In the second place, the educational effect of well planned school lunches upon the food habits of the children's parents is considered by many nutritional experts to be highly promising. To the extent



to which this promise materializes, desirable changes in the food habits of adults induced by school lunches will result in wiser spending of food coupons on the part of the participating families. In this respect, therefore, the school lunch program complements the nutritional education which would accompany the food allotment program.

2. The Industrial Feeding Program. There is a real need for better eating facilities in large industrial plants. Substantial improvements have been made during the war, but millions of workers still carry their lunches to work and eat very inadequate noonday meals. Satisfactory hot lunches for all industrial workers would improve nutrition and would provide an outlet for substantial amounts of farm products. However, there is less need for a subsidy in connection with industrial feeding than there is for a subsidy to provide food to low-income families and to school children.

To summarize, the proposal for a food allotment program does not conflict with an expanded and improved school lunch program. In fact, they complement each other in several respects. As to the industrial feeding program, a certain competitive relation probably exists. It appears entirely feasible, however, to adjust the provisions of a food allotment program so as to avoid overlapping with industrial feeding.

In no case is it conceivable that either school lunches or industrial feeding or a combination of both, regardless of the scale on which they may be undertaken, could effectively meet the basic objectives of a national food allotment program: to provide every family access to an adequate diet, and to stabilize the demand for food products from the farms during booms and depressions at a substantially higher level than would otherwise prevail.

#### General Conclusion

These general considerations suggest that during the reconversion and post-war period, a broad-gauged national policy of food distribution will be needed in order to improve national nutrition, to provide for an expanding market for farm products and for a fair level of farm income.

The present analysis leads to the following conclusions:

- (1) A national food allotment program patterned along the lines presented here can be expected to furnish an effective measure which will materially aid in the accomplishment of these objectives.



(2) A food allotment program should not be conceived as replacing other distribution programs now in effect. School lunches should be developed vigorously to reach a much larger proportion of children and should be improved in their nutritional aspects. Industrial feeding as a program on a national scale also offers much promise as a means for improving the diet of the working population and for expanding market outlets for farm products.

(3) The food allotment program alone cannot be expected to solve all problems of national nutrition and agricultural income. It should be conceived as a promising measure which along with other appropriate production, price and distribution policies might substantially contribute to the accomplishment of these objectives.

#### SUPPORTING EVIDENCE AND ANALYSIS

##### Extent of Malnutrition in the U. S.

The Consumer Purchase Study of 1936 revealed that about 80% of all families had diets which failed to meet the National Research Council's standard of adequate nutrition with respect to one or more of seven basic nutrients. The diets of 25-30% of all non-farm and 10-25% of all farm families in the regions studied were rated as "very poor".<sup>1/</sup> Although a similar study in the spring of 1942 indicated some improvement in diets as a result of higher incomes and progress in nutritional education, it is estimated that probably half of all families still lacked riboflavin in their diets, and 25-30% showed deficiencies in calcium and thiamin. About one-third of all urban families fell in income groups where the average diet failed to meet the recommended allowances.<sup>2/</sup>

Recent surveys of school children reveal wide-spread prevalence of malnutrition. In 1940, about three-fourths of the high-school pupils of low-income families in New York had diets with calorie values below their energy needs. Similarly, 72% of children and adolescents in Chicago--representing all the various income, social and racial groups --had inadequate diets. Even in February 1943, a time when employment and payrolls were at a record peak, a nation-wide canvass showed that on the day of the survey 45% of the people had eaten no citrus fruits, tomatoes or salad greens, 34% no dairy products, 25% no leafy and

<sup>1/</sup> Hearings on the National Food Allotment Bill, 78th Congress, p.41 ff.

<sup>2/</sup> Family Food Consumption in the U.S. USDA Misc. Pub. 550. p. 25.



yellow vegetables, 12% no meat, fish or poultry. 1/

The high rate of draft rejections on medical grounds has startled the nation. Between 40-45% of all men called up for induction were rejected for service. General Hershey is said to have pointed out that of those rejected for physical reasons, over half of their disabilities or deficiencies were traceable in some way to under-nourishment or lack of a proper diet. 2/

Seriously harmful effects of malnutrition upon mothers during pregnancy and upon infants have been strikingly demonstrated. The Committee on Diagnosis and Pathology of Nutritional Deficiencies of the National Research Council concludes: 3/

"All the evidence from numerous surveys over the past 10 years to the present among persons of all ages in many localities is without exception in complete agreement that inadequate diets are widespread in the Nation. Although an appreciable percentage of the diets failing to meet the council's recommended dietary allowances were more than 50 percent deficient in amounts of the several essential nutrients, most of the diets were less than 50 percent deficient. Accordingly, there is widespread prevalence of moderately deficient diets."

#### Effect of Income on Food Consumption

Net all malnutrition is due to lack of income. Food habits often do not lead to the wisest choice of foods in terms of nutrition and economy. Income, however, is by all odds the most important single factor responsible for the incidence of malnutrition in the population.

Table 1 shows the effect of the level of family income on per capita food consumption. By expressing the consumption rates in terms of relatives with average per capita consumption as the base, the influence of the income level upon consumption of the various foods becomes clearly evident. With the exception of pulses and nuts, grain products and fats and oils, families in the lower income groups eat very much less of all other foods than do higher-income families. This income effect on consumption is particularly striking with regard

1/ Hearings on the National Food Allotment Bill, 78th Congress, p.41 2/

2/ Hearings Before a Subcommittee of the Committee on Agriculture and Forestry United States Senate, Seventy-eighth Congress, Second Session on S.1331, Jan. 14, 19, 21, 24, 25, and 26, 1944. p. 76.

3/ National Research Council Bul. 109, "Inadequate Diets . . .", p.406.



Table 1.--Effect of income upon food consumption 1/  
(Based upon Consumer Purchases Study, 1936)

Income per family 2/	Per capita food consumption index (aver. per capita consumption = 100) 3/						
	Dairy products	Potatoes (Irish & sweet)	Dry beans: peas, nuts	Green & yellow vegetables	Tomatoes and other vegetables	Citrus	Other & fruits
Average family	100	100	100	100	100	100	100
0 - 499	66	70	100	62	34	56	
500 - 999	93	95	118	83	67	77	
1000 - 1499	109	107	109	100	99	97	
1500 - 1999	113	108	109	114	121	114	
2000 - 2999	121	110	91	128	151	134	
3000 - 4999	127	113	91	143	185	163	
5000 - or over	145	115	109	172	259	230	

Income per family	Per capita food consumption index (Average per capita consumption = 100)					
	Meat, poultry, fish	;	Eggs	;	Grain products	Fats and oils
	;	;	;	;	;	Sugars & sweets
	;	;	;	;	;	;
Average family	100	100	100	100	100	100
0 - 499	57	65	122	102	92	
500 - 999	80	91	102	98	97	
1000 - 1499	102	104	93	98	103	
1500 - 1999	115	117	92	100	103	
2000 - 2999	128	126	91	103	106	
3000 - 4999	145	130	91	110	108	
5000 - or over	205	139	105	127	118	

1/ Data derived from the Consumer Purchases Study, USDA Misc. Publications 405 and 452, adjusted for seasonal consumption and for food eaten away from home. Prepared by BHNHE.

2/ Money and non-money income.

3/ For a description of these food categories, see footnotes on table 5.



to vegetables, fruits, meats, eggs and milk—which comprise the bulk of the "protective" foods so essential for health. The "income elasticity of demand" for the various foods portrayed in table 1 is a basic datum for the appraisal as to how a given change in income is likely to affect the demand for certain kinds of food.

Interpretation of these consumption rates by income groups as indicating income elasticity of demand implies, of course, that a family now in income group I will change its food purchases approximately according to the pattern now observed in families in income group II, if that family were to move into the higher income group. Although this hypothesis has never been empirically verified, it appears to be the best and most convenient assumption to make for this kind of analysis.

In order to evaluate changes in total consumption of specific foods resulting from a change in total income, it is necessary to introduce income distribution as a variable, since changes in national income are usually associated with changes in income distribution. A rough estimate of how size and distribution of national income might affect average per capita consumption is presented in table 2.

The income distributions were prepared in the Civilian Food Requirements Branch, WFA, as rough approximations to what distribution patterns might be expected in 1945 and under three assumptions for 1950. For our present purpose, the accuracy of these estimates is irrelevant. The absolute consumption rates underlying the relatives shown in table 2 were prepared by the BAF for expected normal demand in 1945 (assuming no restrictions in supplies), and were projected from the Consumer Purchases Study. The per capita consumption rates by income groups are held constant for the three 1950 assumptions.

The table reveals that national income and pattern of income distribution can be expected to have a strong influence on average per capita food consumption. Moreover, a given change in national income affects the various foods to quite different degrees. Tomatoes and citrus, sugar, fruits and vegetables, meats, eggs and milk are most sensitive to their consumption rates to changes in income distribution, while fats and oils, sugars and sweets, dry beans and peas and nuts, and potatoes are only slightly affected. Grain products actually show an increased consumption with falling national income and deteriorating income distribution.

These considerations are basic for evaluating the effect of a national food allocation program on the demand for food products. For any given level of national income and income distribution, the effect of supplementing rations by allowing lower rations for food in the low-income brackets can be derived from the income elasticities of demand for the various foods.



The effect of prospective changes in national income and its distribution upon total consumption without a food allotment program can also be estimated on the basis of these income elasticities of demand; and from these two determinations it is possible to estimate the aggregate effect of a food allotment program on consumption under various conditions of national income.

#### Determination of the "Food Allotment"

The basic nutritional objective of the program is to supplement the purchasing power of low-income families sufficiently to enable them to buy an adequate low-cost diet. This means establishing a "nutritional floor" below which no family needs to fall. This nutritional floor is expressed in terms of a specified sum of money per person per year which, if spent with reasonable prudence, will buy a diet adequate to maintain the health of a moderately active adult. The success of the program depends to a large extent upon a realistic determination of the size of this "food allotment". If it is too small, the diets of participant families would not be raised to the level of adequacy; if it is too large, the program would be unnecessarily expensive, and the danger of black markets in food coupons might take on serious proportions.

There are essentially two methods by which the size of the food allotments might be determined: (1) A standard low-cost diet could be established, and its price could be determined by multiplying the standard quantities of the various food components with their respective average retail prices as reported by the BLS; (2) on the basis of a family expenditure survey the amount of total food expenditures could be determined which, at the time of the survey, actually provided an adequate low-cost diet.

The first method has a serious weakness: It offers little opportunity for allowing necessary adjustments for prevailing food habits and various imperfections in the shopping process which makes it difficult for the housewife to buy at any given time just the right kinds of food which would make up an adequate balanced diet. Such a theoretically priced diet, therefore, must be expected to fall considerably short of the budgetary requirements of the average participating family. The second method has the disadvantage that family expenditure studies are expensive to undertake and to keep up-to-date.

Perhaps the most feasible approach would be a combination of these two methods. The actual food expenditures of families barely achieving a nutritional floor of adequacy might be determined from the most recent family expenditure data available on a national scale. At the same time, a standard diet might be priced according to the average retail prices quoted for the year in which the expenditure study was made. From these two determinations the percentage excess of the minimum adequate food



Table 2.--Estimated effect of size and distribution of national income on average per capita food consumption 1/

Assumed 2/ national income (Billion dollars):	Average per capita consumption index (1945 = 100)						
	Dairy products	Potatoes: Irish and sweet	Dry beans: sweet	Green and yellow vegetables	Tomatoes: fruits and citrus	Other vegetables	
140 (1945)	100	100	100	100	100	100	100
150 (1950A)	97	98	99	95	92	94	
105 (1950B)	94	96	98	91	83	89	
58 (1950C)	87	90	92	81	65	76	

Assumed 2/ national income (Billion dollars):	Average per capita consumption index (1945 = 100)						
	Meats, poultry, fish	Grain products	Eggs	Fats, oils & sweets	Sugars	All foods	
140 (1945)	100	100	100	100	100	100	100
150 (1950A)	95	98	99	99	99	97	
105 (1950B)	89	95	100	99	98	93	
58 (1950C)	78	86	103	96	94	85	

Assumed percentage distribution of population  
by income groups

Money and non-money income per family 3/	Under \$500	\$500-1000	\$1000-1500	\$1500-2000	\$2000-3000	\$3000-5000	\$5000 or over
	Percent of persons						
<u>National income 2/</u>							
140 (1945)	2.9	8.4	12.6	12.4	21.6	24.0	18.2
150 (1950A)	3.0	11.0	13.0	14.2	25.1	23.6	10.1
105 (1950B)	5.7	13.8	16.5	16.1	21.7	19.4	6.8
58 (1950C)	12.0	25.8	25.0	14.7	14.0	7.3	3.2

1/ From data prepared by CFR Branch, WFA. The underlying demand elasticities are projected from the Consumer Purchases Study and include trends in consumption. The income distributions (in terms of 1943 dollars) are derived from various sources. They are presented here not as forecasts, but merely as hypothetical distribution patterns to illustrate the effect of income distribution upon consumption.

2/ The three conditions for 1950 represent full employment (A), moderate unemployment (B) and severe depression (C). The average income per consumer unit is estimated at \$3,398 in 1945, and in 1950 at \$3,333 under (A), \$2,721 under (B), and \$1,661 under (C). Estimated population is 131.7 million in 1945, and 144 million in 1950.

3/ Adjusted for 1943 purchasing power of the dollar.



expenditure over the theoretically priced standard diet could be determined. This percentage excess represents an estimate of an allowance for the food habits of low-income families and for the various imperfections in the shopping process, which should be added to the retail price of the standard diet to make up the "food allotment".

This method has been applied in estimating the size of the food allotment under the conditions portrayed in "The 1942 Wartime Spending and Saving Study". The food allowances established by the BHNNE based upon the National Research Council recommendations for specified nutrients would have cost \$141 per person per year at prices prevailing in spring 1942. The actual average food expenditure per person per year for the lowest income group which on the average consumed a diet roughly equivalent in nutritional value to the recommended allowances was \$180 or \$39 above the theoretically priced standard diet. Since in that income group some families undoubtedly had diets above the minimum requirements, an allowance of 20% was added to the retail cost of the standard diet--which appears to be conservative and might be expected to work out fairly well.

It probably would also be desirable to adjust the food allotments for variations of food costs between major regions of the United States. Other refinements might be contemplated which would adjust the standard diet to prevailing food habits in the various regions.

#### Family's Contribution to the Food Allotment

How much should the participating family be required to contribute to the cost of its food allotment? The effectiveness of the program depends to a large extent upon this decision. In order to ensure that the bulk of the government's contribution is used to increase food consumption, the family would have to contribute nearly as much as it would normally spend for food. If its contribution were set much lower, the program might not be very effective as a means of increasing food consumption because a considerable part of the government's contribution would then be used for non-food purchases; if the family's contribution were set much higher, the program would not be sufficiently attractive and would make it very difficult for most low-income families to participate. A judicious balance needs to be struck between these two factors. Available data indicate that a contribution of 40% of the family's net family income would probably be a fairly effective way of striking this balance. Administratively, it would be very difficult to determine just how much each individual applicant is normally spending for food. It would be desirable, therefore, to determine the family's contribution on the basis of some average amount which represents the prevailing spending habits of participating families with a fair degree of accuracy.



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The "Wartime Spending and Saving Study" undertaken in spring of 1944 reveals that families in the lowest income group with a reasonably adequate diet spent about 40% of their net money income for food. This percentage tended to increase to about 50% in the lowest income group. If each family's contribution were set at 40% of its income, the result is indicated in table 3. The difference between the average food expenditure without the program and the contribution to the food allotments by the household indicates the maximum limit within which a diversion of the government's contribution to non-food purchases could be expected to fall. It should be emphasized that this is a maximum limit, indicating what would happen if participants bought no more food than the required minimum. Some would doubtless buy more.

On the whole the discrepancy between normal expenditure and family contribution tends to increase as the family income declines. From a general-welfare viewpoint, this means that the possible diversion of the supplemented income from food to non-food purchases tends to be largest in families whose expenditures for non-food essentials are likely to be most deficient--e.g. expenditures for medical care, clothing and housing. To some extent, therefore, the Food Allotment Program would tend to enable families in the lowest income groups to spend somewhat more for these essential non-food goods and services, while at the same time their consumption of food would be greatly increased.

As has been pointed out above, this possible diversion of public funds into non-food uses should be kept within reasonably narrow limits. As table 3 indicates, under 1942 conditions, the upper limit for such a diversion would be about \$79 for the average participating family, which amounts to about 33% of the government's contribution. This degree of possible diversion may be too high. The question as to what degree of diversion might be tolerated is open to question.

Within the present assumed framework for the program, there are two obvious means by which the degree of possible diversion might be reduced without introducing additional administrative complications: (1) By increasing the proportion of income paid for the food coupons, or (2) by increasing the size of the food allotment. The first approach would tend to seriously decrease participation, since earmarking of a larger and larger proportion of family income for food purchases becomes increasingly difficult to manage, especially for low-income families. The second approach could only be justified by increasing the allowance for food habits and shopping imperfections, and such an increase would tend to increase the danger of "black market" transfers of food coupons. It should be possible, however, to develop other administrative devices which would reduce the degree of possible diversion without complicating the program unduly.



Table 3.--Government's and household's contributions to food allotments of urban households. 1/  
(Based on spring 1942 conditions)

Annual net income per household	Urban participants					
	Average food expenditures per household without program	Average value of food allotment per household	Percentage increase of food allotment over normal	Contribution by food householder	Contribution by government	Contribution as percent of total allotment
	Dollars	Dollars	Percent	Dollars	Dollars	Percent
All participating families	405	561	39	326	235	42
0 - 499	202	342	69	111	231	63
500 - 999	381	518	38	280	238	46
1000 - 1499	541	724	34	497	227	31
1500 - 1999	667	952	43	685	257	27
2000 - 2499	967	1095	15	854	241	22
2500 - 2999	1082	1258	16	1067	191	15
3000 - 4999	1634	1851	21	1446	405	22

1/ Prepared by BIEHE.

2/ The per capita food allotment is \$170, the same in each income group. The increase in food coupons issued per household is entirely due to the increase in the number of members. The average size of the participating households increases from 2.01 persons in the lowest income group to 10.82 persons in the highest. Only very large families in the high income groups would find it advantageous to participate and their number is quite small. Only about 1 percent of the participating families are estimated to have over \$2500 incomes.

These data = T8 in 4/18/45 rpt. The data has been  
add'l. notes (341s)



Table 3 indicates that the food expenditures of all participating families would be increased by almost 40%, varying from about 70% in the lowest income groups to 15 to 20% in the higher income groups. The government's contribution would average 42%, ranging from 68% in the lowest to 15 to 20% in the highest income groups. Under 1942 conditions, the total contribution of the government would amount to 744 million dollars. This assumes, however, that the program would cover only urban families.

#### Participation in the Program

It is possible to get a fairly concrete picture of what effect a national food allotment program might have upon food consumption by applying the general provisions of such a program to the data obtained from "The 1942 Wartime Spending and Saving Study". It should be kept in mind that we were approaching full employment in the spring of 1942, and both payrolls and wages were reaching record high levels. The number of families which could have been expected to participate in 1942 would have been very much smaller than during 1935 or 1936, the time of the Consumer Purchases Study. Similarly, the size of the government's contribution would have been much smaller in 1942 than in 1936. Hence, the aggregate effect of the program upon food consumption under 1942 conditions would have been much smaller than under the depression conditions of 1935-36.

The Bureau of Human Nutrition and Home Economics undertook the analysis of participation by starting with the survey records for the urban population. All urban families whose per capita net money income was less than  $2\frac{1}{2}$  times the value of the food allotment (that is, less than \$425 per person per year) were assumed to represent the "eligible households" who would benefit from participating in the program. It would be unreasonable to assume that all these "eligible families" would immediately come into the program. It would take some time after it is enacted to make people aware of its existence and familiar with its benefits. Drawing upon experience with the Food Stamp Plan, a percentage of participation was assumed as shown in table 4. About 24% of all urban families could have benefited by the program. However, it appeared realistic to assume that not more than 60% of the 5.4 million eligible households would actually have participated during the first year. This would have meant somewhat over 3 million urban families with about  $10\frac{1}{2}$  million persons.

It appears likely that the rate of participation would depend largely upon 3 factors: (1) The amount of "red tape" involved; (2) the financial arrangements offered for payment of the family's contribution; (3) the social stigma attached to participation. The first and third of these factors should obviously be minimized as much as possible and the second should be made as flexible as possible without impairing a high degree of regularity of participation throughout the year. It probably would be



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unnecessary to devise some suitable form of consumer credit which would enable low-income families to finance their contributions without jeopardizing other important aspects of the family budget.

As table 4 shows, it appears reasonable to expect that quite a number of families with incomes of \$2000 or more could benefit by the program. These are families with large numbers of children and high food requirements, and with a per capita income of less than 2½ times the food allotment (\$425). Participation of these families might also be desirable from the viewpoint of minimizing social stigma.

Table 4.--Estimated urban participation in food allotment program in cities of over 2500 population  
(Based on spring 1942 conditions) 1/

Annual net money income per household	Total households	Number of households	Estimated percentage of participation	Number of persons participating	Number of households participating	
Dollars	Thousands	Thousands	Percent	Thousands	Thousands	
All families	22,646	5,403	20.5%	80	3,162	10,480
0 - 499	1,464	1,211	80	969	1,948	
500 - 999	2,707	1,772	70	1,241	3,785	
1000 - 1499	2,674	1,143	80	572	2,437	
1500 - 1999	3,422	659	40	264	1,478	
2000 - 2499	3,616	402	20	80	515	
2500 - 2999	2,678	150	20	30	222	
3000 or more	6,085	68	10	6	65	

1/ Prepared by BEMHE.

This is T 6 in 4/18/45 anal.



## Food Consumption Under the Program

How would the supplementation of purchasing power for food affect food consumption? Assuming that all participating families would spend their food coupons in about the same way as those families who actually did spend \$170 per person per year for food in 1942, participant families would consume over 60% more tomatoes and citrus fruit; about 30% more milk, meat, poultry and fish; 10 to 20% more succulent vegetables and fruits (except tomatoes and citrus); and about 10% more eggs and potatoes. The consumption of dry beans and peas, nuts, grain products, fats and oils, and sugars and sweets would probably not be affected significantly. These data are presented in table 5.

These estimates pertain only to urban participants. Similar estimates for rural areas are in progress. Moreover, it is intended to derive corresponding estimates under various assumptions regarding income distribution and size of the national income.

A rough indication of the order of magnitude of the effect on total consumption may be gained by comparing the aggregate increases which have been estimated for participating families with total urban food consumption under 1942 conditions. Neglecting whatever effect the increased demand on the part of the participants may have upon retail prices, the additional consumption brought about by the program represents a 5% increase in the total consumption of tomatoes and citrus fruit, 3% of milk, meat, poultry and fish, and from 1 to 2% of vegetables, fruits, eggs and potatoes. There can be no question that these consumption effects would be substantially greater under less prosperous conditions than those prevailing in 1942.

Table 6 demonstrates in which respects the consumption patterns of the participating families would deviate from the low-cost adequate diet, and indicates to what extent they would meet the recommended dietary allowances. It is apparent that the combination of consumer preference and price relationships existing in the spring of 1942 would have resulted in the purchase of more fruits and vegetables, meats, eggs, fats and sugars, and less of pulses and nuts, milk, and potatoes than the low-cost adequate diet suggests. These estimates indicate the directions in which a vigorous educational program should be undertaken to assist families to spend their food coupons more wisely with respect to nutritional requirements.

In this connection, the Civilian Food Requirements Branch of WFA has made some valuable estimates as to the amount of supplemental food allowances which, with a minimum of additional expenditures, would raise the diets of low-income families to nutritional standards of adequacy. These estimates were prepared on the basis of the normal demand which might be expected for the various categories of food in the various income groups in 1946 under free market conditions. The food deficiencies



Table 5.--Estimated increases in food consumption of participants in the Food Allotment Program. 1/  
(Under 1942 conditions)

Food groups	Average per capita consumption: Consumption increase		In per capita pounds 4/	In percent
	Without the program 3/	Under the program		
	Pounds	Pounds		
Milk 5/	330	425	95	29
Potatoes & sweet potatoes	130	141	11	8
Mature dry beans, peas, nuts 6/	19	19	0	--
Green, yellow vegetables	96	106	10	10
Tomatoes, citrus fruit	95	188	60	63
Other vegetables, fruits 7/	126	159	27	21
Meat, poultry, fish 8/	97	127	30	31
Bacon	46	49	5	11
Grain products 9/	154	154	0	--
Fats, oils 10/	56	56	0	--
Sugars, sweets	45	45	0	--
Total food	1,190	1,426	236	20

1/ Prepared by BMRRE.

2/ Based on consumption in spring 1942 without any adjustment for seasonality.

3/ Based on consumption of eligible families, spring 1942.

4/ Difference between consumption without program (column 1) and consumption of families spending between \$2.99 and \$5.50 per person per week for food, spring 1942.

5/ Approximately the quantity of fluid whole milk to which all dairy products excluding butter are equivalent in minerals and protein.

6/ Includes the dry weight of cooked or canned dry beans, peas and lentils such as baked beans. Includes shelled weight of nuts.

7/ Includes fresh fruit equivalent of dried fruit.

8/ Excludes bacon and salt pork.

9/ Includes two-thirds the weight of commercially-baked goods added to the weight of flour, meals, cereals.

10/ Includes butter, bacon and salt pork.

Source of data: Survey of Family Spending and Saving in Wartime (Food Lists).

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Table 6.-Comparison of estimated diet of urban participants  
with low-cost adequate diet  
(Under 1942 conditions) 1/

Food group 3/ or dietary essentials	Low-cost: Estimated adequate consumption of diet		Participant's consumption as percent of low-cost diet	
	1 lb	1 lb	1 lb	1 lb
Average quantities per person per week				
Milk	1 lb	11.37	8.17	72
Potatoes, sweet potatoes	1 lb	3.46	2.72	79
Mature dry beans, peas, nuts	1 lb	.48	.28	58
Tomatoes, citrus fruits	1 lb	1.63	2.97	182
Green, yellow vegetables	1 lb	1.54	2.04	152
Other vegetables & fruits	1 lb	2.40	2.95	123
Eggs	1 lb	.56	.95	170
Meat, poultry, fish	1 lb	1.73	2.45	142
Grain products	1 lb	4.23	2.78	66
Fats and oils	1 lb	.85	1.06	125
Sugars and sweets	1 lb	.67	.80	119
Average nutritive value 4/ per person per day				
Food energy	calories	2,815	2,616	93
Protein	grams	93	85	91
Calcium	milligrams	1.20	.95	79
Phosphorus	milligrams	1.69	1.49	88
Iron	milligrams	12.8	17.9	95
Vitamin A value	I.U.	6,819	8,077	118
Ascorbic acid	milligrams	102	131	128
Thiamine	milligrams	2.05	1.96	96
Riboflavin	milligrams	2.57	2.30	89
Niacin	milligrams	17.4	17.8	102

1/ Prepared by BHNHC

Source of data: Survey of Family Spending and Saving in Wartime, USDA and ANI 78, Family Food Plans for Good Nutrition.

Based on consumption of families spending between \$2.99 and \$3.50 per person per week for food, spring 1942, without any adjustment for seasonality.

For description of food groups, see footnotes on table 6.

Estimated at nutritive value per pound of food group as consumed by urban families in the income group \$500-\$999, spring 1942, with these exceptions--iron, thiamine, riboflavin and niacin of grain products are computed on the basis of present-day levels of enrichment.

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Table 7.--Low-cost food supplement required, and additional food consumed by participants under allotment program

Food groups	Percent Increase in per capita consumption of affected groups under			Food allotment program 2/		All participants Percent	
	Low-cost food supplement 1/			All groups 3/			
	Income groups	<\$500	\$500-1000	\$1000-1500	All groups 3/		
		Percent		Percent	Percent	Percent	
Meat	68	26	8	21	21	29	
Vegetables	43	--	--	5	5	8	
Beans, peas, nuts	150	114	16	67	67	--	
Other, yellow veg.	--	--	--	--	--	10	
Tomatoes, citrus	171	56	--	40	40	63	
Other veg., fruits	--	--	--	--	--	21	
Meat, poultry, fish	20	--	--	2	2	31	
Bread	--	--	--	--	--	11	
Grain products	3	6	5	5	5	--	
Fats, oils	--	--	--	--	--	--	
Sugars, sweets	--	--	--	--	--	--	
Rest of diet	21	8	2	6	6	39	

Food supplement required to bring average per capita food demand of the three lowest income groups up to adequacy with the lowest additional expense, under 1942 conditions; the supplement expressed as a percent of the demand. Prepared by CFR Branch, WFA.

Additional food which the urban participants are expected to buy under the program, under 1942 conditions, expressed in percent of their normal consumption (see Table 3). About 10.5 million persons as of 1942.

Households per household less than \$1500 urban and rural. About 31.1 million persons in 1945.

Note: The last two columns are not strictly comparable. However, they indicate the general direction in which the consumer preferences in low-income groups (last column) differ from what the least-cost supplementation of their dietary deficiency would require.



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appearing in the average per capita consumption rates in income groups below \$1500 were corrected by means of diet plans that would supplement these normal consumption rates with additional quantities of specific foods. The size of these supplements are shown in table 7, and are compared with the effects of the food allotment program. In contrast to the results expected from free consumer choice under the allotment plan, fully adequate diets could be planned without any additions in such relatively expensive foods as green and yellow vegetables, other fruits and vegetables (except citrus) and eggs, with only moderate increases in meat, and considerable increases in beans, peas, nuts, and grain products. With respect to dairy products, tomatoes and citrus fruits, consumer preferences fortunately fall in line with urgent nutritional requirements.

This approach of translating shortages in certain nutrients into kinds of foods that can be bought relatively cheaply in the market is especially valuable for furnishing guidance in nutritional education which should form an integral part of a national food allotment program, and in the development of such distribution measures as school lunches and industrial feeding. It should also be useful in determining desirable production adjustments to meet nutritional requirements.

#### Designating Coupons for Specific Foods

In the former Food Stamp Plan there were two kinds of stamps: orange and blue. The blue stamps could be used to buy only those foods which were on a "surplus list." The purpose of this arrangement was to concentrate the additional purchasing power on those foods which were in surplus.

The blue stamps probably were never fully effective as a means of concentrating additional purchases on surplus items. The Stamp Plan was doubtless less effective in this respect than the programs based upon direct purchase and distribution of commodities. To be fully effective as an agricultural measure, any program should be designed to step up the consumption of specific commodities in specific areas--and to step it up quickly in order to prevent glutted markets and ruinous prices.

The proposed food allotment program would give consumers almost complete choice in spending their coupons. However, as the plan is here outlined, the Director could designate certain coupons to be used only for specific groups of foods. For example, the Director could announce that for a certain month coupon No. 10 would be good only for eggs or green vegetables.

This feature is important from the standpoint of surplus disposal. The difficulties of enforcement are fully recognized. But even if compliance



were far from perfect, this feature of the program might well be much more effective than the "surplus list" under the former Food Stamp Plan.

It is also recognized that the Director's authority to designate coupons for particular foods should be limited. Most of the coupons should be valid for any food. The Director probably should never be allowed to earmark more than one-third of the coupons in this way. If he did so, the program would be much less attractive to low-income families. Moreover, limiting the use of a portion of the coupons to foods which happened to be in surplus should not be allowed to interfere seriously with a balanced nutrition program. Although most of the coupons should be valid for any food, it may be very desirable to insist that part of them be used for specific foods in order to make the program more effective as an agricultural measure.

Thus far we have discussed the possibility of requiring that certain stamps be used to buy particular foods which were in surplus. But other stamps could also be designated to buy particular foods which were especially needed in low-income diets.

The preceding discussion indicates some of the difficulties of any dual-purpose program. The food allotment program has two major objectives: better nutrition and better markets for agricultural products. There is not much conflict between these objectives but occasionally there may be some conflict. In a general way it is clear that any program which allows low-income people to buy more food will improve nutrition and will expand markets for food.

Actual operations would probably reveal, however, that certain proposals which would make the program more effective as a surplus removal measure might interfere with good nutrition--and certain proposals which would make the program more effective as a nutritional measure might lessen its effectiveness as an agricultural measure. Requiring that fifty percent of the coupons must be used to buy beans would reduce a bean surplus, but might lead to unbalanced diets or even to demonstrations of protest. Requiring that several coupons be used to buy milk might be very desirable from the standpoint of nutrition, but might be inadvisable if there were a milk shortage.

But if both objectives--nutrition and surplus removal--are kept definitely in mind, there appear to be real possibilities in requiring some coupons to be used for particular foods. If wisely integrated and administered, such a provision could accomplish a great deal both for nutrition and for agriculture. To safeguard this feature against misuse, it might be advisable to require the joint approval of the Bureau of Human Nutrition and Home Economics and the War Food Administration before designating a specified amount of coupons for a restricted list of foods.



### Certification and Purchase of Coupons

The food allotment program under discussion would be available to millions of non-relief families. It is very important that these families participate. They should not be discouraged from doing so by an elaborate means test. On the other hand, the government agency operating the program will have to obtain essential data on family income and on size of family.

This is not a difficult problem in the case of families receiving public assistance. The welfare agencies have detailed records for such families and could provide the necessary data for determining eligibility and for computing the 40 percent of income charge for the coupons. But it should be made easy for non-relief families to participate, and in a way that minimizes any social stigma. This could be done by a process of "self-certification" in which applicants would fill out simple forms (like the short income tax form), listing all income received by members of the family and stating the number of persons in the family. Some spot checking doubtless would be needed to weed out chiselers--but this need be no more elaborate, and no more objectionable, than the checking done to prevent evasion of income taxes.

Widespread publicity would be needed so that every eligible family would realize, first, that it is eligible and, second, the advantages and costs of the program. Any eligible family should be able to obtain a form at some local agency--e.g., the Post Office or a bank. This form would be filled out and submitted with an application to purchase coupons. Eligible families would be certified to buy coupons of a designated value at a designated price.

The coupons would be sold by some local agency under careful supervision of the Federal Government. In isolated communities, they could probably be sold by mail.

### Application to Rural Areas

Undernutrition is not confined to urban families. Many farm families and many rural non-farm families need more and better food.

This situation probably should be met in part by assisting rural families to produce more of their own food. Encouragement of home gardens, poultry flocks, and so on, can do a great deal to improve rural nutrition. But also some modified food allotment program probably should be available to rural people.

A rural food allotment program presents many difficulties, however. Farm families--and most other rural families--probably should be expected to produce some of their own food. This means that their allotments should



be smaller than the urban allotments--smaller in terms of quantities of food to be purchased, and smaller in terms of the value of the food coupons.

This immediately presents a difficult problem, because it is not easy to throw all rural families in one group and say that each should produce 20 percent, 30 percent, or 50 percent of its own food. The percentage should vary as between regions, as between occupations, and perhaps even as between individual families.

In principle, each family should be expected to grow as much of its own food as can be grown economically. Probably the only way to accomplish this is to get information from all rural families about the foods they are growing; about the foods they think they could grow; and about the help, if any, they need to grow more. The county agricultural agents and the State extension services could help greatly by reviewing all rural applications and helping to determine what and how much foods each family could be expected to produce.

Once this is determined, the allotment for a rural family would be the cost of the additional foods needed for a low-cost adequate diet.

On the whole, the most practicable procedure seems to be to start the food allotment program in urban areas, but to make it available in a few rural areas on an experimental basis. Practical experience might show the need for many modifications of the program in rural areas--particularly to gear it in with programs for more efficient home food production.

